

Application No.: 10/071,962  
Attorney Docket No.: TNX 98-03-01  
Customer No.: 26839

34. The agonist antibody or binding fragment of claim 31 or 32, which interacts with the extracellular portion of human G-CSF receptor.
35. The agonist antibody or binding fragment of claim 34, wherein said human G-CSF receptor used to generate said antibody is a native human G-CSF receptor or a mutant thereof with substitutions, insertions, or deletions useful as an immunogen to generate antibodies against human G-CSF receptor.
36. The agonist antibody or binding fragment of claim 31 or 32, wherein the antibody interacts at an epitope between amino acid residues 1-603 (SEQ ID NO:27) of the G-CSF receptor.
37. The agonist antibody or binding fragment of claim 31 or 32, wherein said antibody is a monoclonal antibody.
38. The agonist antibody or binding fragment of claim 31 or 32, wherein the fragment is Fab, F(ab), F(ab'), F(ab')<sub>2</sub>, Fd, Fv, or single chain antibody.
39. The agonist antibody of claim 37, wherein the antibody is mAb163-93 or mAb174-74-11, which are produced by the hybridoma cell lines deposited at the ATCC, Manassas, Virginia, under Accession Nos. HB 12699 and HB 12700, respectively.
40. A cell line that produces the agonist antibody or binding fragment of claim 31.
41. A hybridoma cell line wherein the cell line is HB-12699 or HB-12700 as deposited with the ATCC, Manassas, Virginia.
42. The agonist antibody of claim 31, wherein the antibody binds to the same epitope as either the monoclonal antibody mAb163-93 or mAb 174-74-11.
43. The agonist antibody of claim 31, wherein the CDRs of the heavy chain variable region include at least one of the following amino acid sequences:  
CDR1: Asn Tyr Gly Met Asn (SEQ ID NO: 15),

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CDR2: Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Gly Asp Phe Lys Gly (SEQ ID NO: 16), or

CDR3: Glu Gly Phe Tyr Gly Gly His Pro Gly Phe Asp Tyr (SEQ ID NO: 17)

or the CDRs of the light chain variable region include at least one of the following amino acid sequences:

CDR1: Lys Ser Ser Gln Ser Leu Leu Ser Ser Arg Thr Arg Lys Asn Tyr Leu Ala (SEQ ID NO: 18),

CDR2: Trp Ala Ser Thr Arg Glu Ser (SEQ ID NO: 19), or

CDR3: Lys Gln Ser Tyr Asn Leu Arg Thr (SEQ ID NO: 20),

or the CDRs of the heavy chain variable region and the CDRs of the light chain variable region each include at least one of the amino acid sequences listed above for the respective heavy and light chains, .

44. The agonist antibody of claim 31, wherein the CDRs of the heavy chain variable region include at least one of the following amino acid sequences:

CDR1: Ser Tyr Ala Met Ser (SEQ ID NO: 21),

CDR2: Gly Ile Ser Ser Gly Gly Ser Tyr Ser Tyr Tyr Pro Gly Thr Leu Lys Gly (SEQ ID NO: 22), or

CDR3: Glu Ala Tyr Asn Asn Tyr Asp Ala Leu Asp Tyr (SEQ ID NO: 23);

or CDRs of the light chain variable region include at least one of the following amino sequences:

CDR1: Arg Ala S r S r S r Val Thr Tyr Val His (SEQ ID NO: 24),